NWX-US DEPT OF COMMERCE

A New Measure of Multiple Jobholding in the U.S. Economy
February 17, 2021
12:30 pm CT

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode. During today's Q&A session if you'd like to ask a question, please press Star then 1. Today's call is also being recorded. If you have any objections you may disconnect at this time. I would now like to turn today's meeting over to your host Mr. Keith Bailey. Thank you. You may begin.

(Earlene): Actually…

Keith Bailey: Good morning, actually (Earlene).

(Earlene): … sorry. Yes thank you. Sorry about that (Cedric).

Keith Bailey: All right.

(Earlene): Thank you (Cedric) and thank you to Jeanna Bunn- Hector from the US Census Bureau for hosting our Webinar. Good afternoon everyone and thank you for joining us to kick off the 2021 LED Webinars. We have a lot of exciting presentations planned for this year.

Before I introduce our presenters, I am thrilled to invite all of you to the 2021 local employment dynamic partnership virtual workshop on Friday, April 30. This year's theme is New Horizons Charting the Course with Data. We will be highlighting the work of our state labor market information partner and other data users through plenary sessions. Please visit our web site at L-E-H-D-.C-E-S.census.gov for more information.

On behalf of the US Census Bureau and the Local Employment Dynamic Partnership in collaboration with the Council for Community and Economic Research in the Labor Market Information Institute it is my pleasure to welcome you to the first LED Webinar of 2021 -- a new measure of multiple job holders in the US economy with our presenters Keith Bailey and James Spletzer.

This riveting presentation looks at measures of multiple job holdings using the US Census Bureau's Longitudinal Employer Household Dynamics data. This new series shows that 7.8% of persons in the US are multiple job holders and the number has been trending upward during the past 20 years.

The data also shows that earnings from the secondary jobs are on average 27.8% of a multiple job holder's total quarterly earnings. These new statistics tell us that multiple job holding is more important in the US economy than realized.

Keith Bailey is the Assistant Center Chief for the Longitudinal Employer Household Dynamics Research for the Center for Economic Studies with the US Census Bureau. Previously Keith worked as the Director for the Center for Workforce Information and Analysis or CWIA within the Pennsylvania Department of Labor and Industry.

He began his professional career with CWIA in the early 1990s where his work focused on Bureau of Labor Statistics Employer Surveys. He led a team that defined the commonwealth industry, clusters as well as cluster data tools still in use by the Local Workforce Development Board. Bailey earned a bachelor’s degree in quantitative business analysis from the Pennsylvania State University and a Master’s Degree in Public administration from Shippensburg University of Pennsylvania.

We also welcome back James Spletzer, a principal economist at the US Census Bureau Center for Economic Studies. He joined the US Census Bureau in 2012 as Principal Economist for the Longitudinal Employer Household Dynamics Program in the Center for Economic Studies.

Fletcher has published widely on many topics such as measurements of wage trends, gross job and worker flows and employer provided training. He is a coeditor of the book The Creation and Analysis of Employer Employee Matched Data and Labor in the New Economy.

His current research interests are employment dynamics, economic measurements and the application of linked employer employee data. He received his Bachelors in Economic and Mathematics from Knox College and his PhD in Economics from Northwestern University. He joined the US Bureau of Labor Statistics in 1990 as a Research Economist and became the Director of Research for the Office of Employment and Unemployment Statistics in 2001. With that it is my honor to welcome our presenters and my colleagues Keith and Jim.

Keith Bailey: Thank you (Earlene). I want to take this opportunity in behalf of Jim and myself to thank everyone for choosing to be with us for this Webinar. I will start with some introductory information about why this was pursued and the data sources that we utilized for measuring multiple job holding in the US economy. We will then transition to Jim who will walk you through some of the key findings and results of our research. Then we will conclude with some next steps and then we will turn it over to Q&A for the attendees.

As always with census presentations we must start with the format of the standard format and disclaimer that all opinions and conclusions and

misspoken words expressed during this presentation are those of the authors and do not represent the views of the US Census Bureau. The data has also been cleared through the Census Bureau Disclosure Review Board. The numbers are on your screen.

First let's start with how we started with multiple job holdings. When I was employed with the Commonwealth of Pennsylvania local workforce planning agency contacted the labor bureau asking what is on the surface a simple question, do we know how many persons in a particular region hold multiple jobs and how much do they earn from each job?

The challenges we faced although we had access to the detailed Pennsylvania unemployment insurance wage record data was twofold. One, we were unable to look at any other states data. So when you have an area that shares a labor market with an adjacent state the details of multiple job holdings are not knowable as you only have access to the data.

The other challenge we have is the quarterly nature of the wage record data. For someone who may have multiple jobs if that job exists in the same quarter of data we have no way of knowing whether those jobs are concurrent or sequential. So the primary goal of our research was to look at defining multiple job holdings using quarterly wage record data and then also document what that multiple job holding may look like over time.

There are some obvious and maybe some not so obvious benefits and utilities to looking at multiple job holdings. For those that have looked at multiple job holdings using the existing data sets there is almost always an economic impact.

There's other measures you can look at workforce participation ratios. So knowing that persons are engaged in the labor force represents maybe an incomplete picture of the relationship between employees and employers because it often does not - is not able to track or capture the multiple job holding aspects.

There are also presents some particular hurdles for workforce entrants. Those of us in labor market research often look at the multiple job holders, are they actually removing opportunities for new individuals or less experienced individuals to come into the workforce. While our research will not address those types of questions the research into knowing what multiple job holdings looks like across the country can help to frame that research.

Workforce injuries and worker injuries. Common literature indicates that the more jobs someone has and the variations in those jobs can lead to potential injuries whether they are related to the industry or like repetitive stress disorders and so forth given the hours worked. Also work\life balance which is a critical component of looking at the new economy with increases in telework and how do you balance work and life.

Also looking at worker characteristics. These last two, the worker characteristics and the larger sample size are advantages to our approaches. We can begin to look at the demographics of the workers in the industries in which the multiple job holding occurs -- more details as we get into the presentation. We also have incredibly large sample sizes across various levels of geography -- a bit more about that in a few moments.

These LEHD or Longitudinal Employer Household Dynamics data is serving as the foundation of what is called the job frame within Census. Census is currently developing or has developed a person frame, a business frame an

address frame and a job frame. The LEHD as I mentioned is the framework for the Census's job frame.

It’s important to recognize that when we refer to the term job this is an instance of an employee employer relationship. Again a difference between the person frame and the job frame is that one person may hold more than one job.

Looking a little bit into the background of the Longitudinal Employer Household Dynamics data it is longitudinally links employer employee micro data. The program began nearly 20 years ago, began with partnerships with the select number of states I believe Maryland was one of the early implementers. We now have the partnership with 47 states the -- District of Columbia and we're proud to welcome Puerto Rico back into the partnership after a brief hiatus from the partnership.

The LED partners provide to census individual level unemployment insurance wage records and employer level quarterly Census of Employment wages establishment data. For those familiar with the LMI community the QCW is a BLS product. The state partners simply provide to us a carbon copy of the QCEW data that they are required to provide to BLS.

That level of data goes down to the county level across all LED partners. So it is very, very specific geography available within the LEHD data.

What we do with that state partner provided data is we are able to link that with other observables in the worker -- the age, the gender, education levels. What we do is we take a combination of available survey data. We align it through a process called a Personal Identification Key at census or the PIK. That is the linkage that is used.

A quick technical note the identifiable data that comes from the states once it reaches the census' systems it is replaced with a PIK. So we no longer have the individually identifiable data within the LEHD infrastructure while we do retain the micro data aspect. So we can look at individual records, they are simply no longer identifiable records. We also link the employer information with firm information available through various census surveys and other collections -- firm age, firm size being the dominant two that we look at from an employer perspective.

As previously mentioned I'll restate again here, big avenges or key advantages of using the LEHD data is it’s inherently large sample size. And so we're looking at over 96% of the UI covered employment data across the entire country. That varies depending on the nature and status of the partnership.

As partners come in and leave we do have some variations but generally speaking we have about 95 to 96% of the UI covered employment. And we have earnings information for each job a person holds.

Continuing and finishing up with the LEHD overview, we have partners as I mentioned that have joined at different times and have provided different amounts of historical data. Our research focused on 18 partners that have data consistently from the second quarter of 1996 through the first quarter of 2018. These partners account for just under half of the total national employment within the LEHD infrastructure.

Again want to reinforce the job is the presence of an employer employee match but the earnings are the total amount earned during the quarter for that match. Jim will get into more details as to the nature of the quarterly earnings data that they have available to us.

We did restrict the sample to individuals that actually have a defined age between 16 and 99 working in the private sector. Our sample represented 4-1/2 billion individuals in that time period or roughly an average of 51 million persons per quarter that we examined. With I have the honor and pleasure of turning over the presentation to my colleague and co-author James Spletzer.

James Spletzer: Thank you Keith. Next slide please. The wage records that we get our incredibly sparse. There is essentially three data elements. The individual identifier the SSN which Keith said we transform into the PIK, the Employer Identification Number essentially the UI account number and then the earnings of that employer employee match. So with those three data elements it's really difficult to define multiple job holding.

Someone once asked me, "Why don't you just count people who have two jobs?" And the problem is that if there is the presence of a job and employer and employee match we don't know whether it occurred for one day one week or all 13 weeks of the quarter. So if we do observe an individual with two distinct jobs, two employer employee matches within the quarter we don't know whether those jobs were held sequentially like a job change, you're moving from Job A to Job B or whether they were held consecutively at the same time.

And because of this labor supply problem we had to go in and really think about how to define multiple job holding. And our solution is going to be a standard what we term a standard algorithm in the LEHD and that's to rely on fall quarter jobs. Next slide please.

Full quarter jobs is when employer employee match the last three quarters and we're only going to look at the middle quarter. So they may work first quarter,

second quarter, third quarter and the second quarter will be what we term a full quarter job.

The advantage of this is we know that they were working at least sometime in the first quarter -- January, February March -- they're working sometime in the third quarter and they were also working in the second quarter. So were going to assume that they worked all 13 weeks of the second quarter.

With this as sort of the background we - the official definition of multiple job holding that we rely on as I'll read from the screen an individual multiple job holder if he or she holds two or more jobs in the quarter and at least one of the jobs is a full quarter job. So we're relying on a long-lasting stable job and then we look for the presence of additional income from another UI covered job in this quarter.

We acknowledge that this is an underestimate of the true amount of multiple job holding. If someone does hold two jobs in the quarter and neither one is the full quarter job we just toss out that - what we define it as not multiple job holding even though it may be. And we also acknowledge that we only have UI covered jobs. So we don't have government jobs. We don't have self-employment.

So when we compare to other series that have self-employment we should be under - our estimate of multiple job holding should be under those the estimates that come from these other data sources because of coverage issues. We'll get into this a little bit more.

This is a nice little graphic that I rely on to try and define multiple job holding. In the rows on the left you have an individual who may have zero full quarter jobs, one full quarter job, two or three. And on the columns going

across the individual may hold one job, two jobs or three or more jobs. Every individual contributes to one of these - every individual in the LEHD contributes to one of these cells.

For example at the upper left N01, this is an individual who holds a job that's not a full quarter job. An example is my teenage daughter who only works during the summer but doesn't work when she's in school. Many of us are in cell N11 which is we have one job and that is a full quarter long lasting stable job.

If we can hit the next slide Keith. These, the shaded cells here are what we're calling multiple job holders. They have at least one full quarter job and they have at least two or more jobs so it's the lower right of this matrix.

With this definition in mind we can go in and quantify. And the sum of the shaded cells was 7.2% of all employed individuals in the LEHD. This is averaged over all quarters. We'll look at the time series in a little bit. The most - oops, sorry back please.

The most filled so is the 69.5 on sort of the left second row. These are individuals who have one job during the quarter and it's a full quarter job. There's also quite a few people who have one job that's not a full quarter job.

Our multiple job holding as I said is 7.2% so how does this vary over time? This is the seasonally adjusted time series from 1996 quarter two to through 2018 quarter one. It averages 7.2% across all the years but you can see that it's rising from 6.8% in '96 to 7.8% in 2018.

It is procyclical. It rises during expansions and as you can clearly see during the 2011 recession during 2000 - I'm sorry during the 2001 recession and during the 2007 to 2009 recession it fell.

Now we've been talking about this graph for quite a while and it's been receiving a good amount of attention. The question we always get is how does it compare to other series and specifically the CPS?

The CPS is the Current Population Survey which is BLS's headline monthly survey where they publish the unemployment rate from the CPS. The top line is just the LEHD multiple job holding series. The bottom line is the CPS multiple job holding series.

You can see immediately let the level of the LEHD exceeds the CPS in every quarter '96 through 2018 but the trends are different. Let me talk a little about why we're not so worried about the difference in levels.

We - the CPS is a monthly series and we created a quarterly series to graph right here. All we did was we averaged the monthly published CPS data. But if you think about the data generation process that generates the CPS data assume - just assume for the moment that the multiple job holdings is very short duration activity. Let's say it sort of occurs in one week but then doesn't occur at all for the rest of the quarter.

Since the LEHD has a quarterly reference frame we would pick up that job, hey it only occurred for one week but it is a source of income during the quarter. So that individual would hold - would be defined as a multiple job holder. But the CPS which asked about a specific reference week, the week of the 12th, it may show up, it may not show up. And if it does show up it'll only show up in one of those months and not the other two months of the quarter.

So when you average the three months together to create a quarterly average you're going to create a sort of downward let's call it a downward bias because of the weekly reference frame and the possible short durations of multiple job holding. So that's why we're not worried about levels. But it's the trend that really concerns us.

Next slide please Keith. Oops I'm sorry one up. Okay I'm sorry. The LEHD is rising by one percentage point from 6.8 to 7.8. The CPS is falling from 6.1 to 5.0. So the trend difference is actually growing quite a bit. We are not the first to have actually looked at this or thought about this.

There's a big discussion about differences in levels. For example I'll give you a 2013 Junior Journal of Labor Economics article by Katherine Abraham and her colleagues who looked at multiple job holdings between the LEHD and the CPS using a different definition of multiple job holdings than we use right here. That article found that the LEHD level and trend were higher than the CPS.

There have been a whole bunch of people that have looked at the American Timing Survey which is part which is connected to the CPS. And they have found that when you probe in detail about activities by multiple job holding rate and the time use survey is greater than that in the CPS.

I can refer you to some articles by (Harley Fraziers) and Jay Stewart, Dori Allard and (Annette Poliska). And there's also a wonderful article by Barry Hirsch and his co-authors who talk about rotation group bias in the CPS. And rotation group bias is seeming to get worse over time.

And rotation group bias may lead to a downward bias in any given quarter and when that bias is getting worse the trend is getting worse in the CPS. So there is not - we're not the first to actually talk about the CPS and the LEHD going different. I think we're the first to actually quantify this in such detail.

You know, there are several reasons to - this leads us to ask what is the direction of the multiple job holding in truth? We have two estimates both of which are flawed in certain ways.

We acknowledge that the LEHD misses some parts of multiple job holding. We just talked about some possible flaws in the CPS. But when we try and think about what the multiple job holdings might have been doing over the last 20 years let me give you three reasons why I think it's going up.

There's been a growing number of jobs in industry where part-time work is considered normal. We're losing jobs out of manufacturing and putting more jobs into retail and various services. We know that the - over the last 20 to 20 plus years there's been stagnation of earnings at the lower end of the earnings distribution. So in order for people to avoid poverty they need to sort of take on multiple jobs just to make ends meet.

And there's been recent advances in technology which has it made it easier and actually reduced the cost of taking on a second job. There's a huge literature about ogling the various gig economy where technology has actually reduced increased multiple job holding.

So I'm going to claim and you can fight - you can push back on me if you want during the question and answer session but I'm going to claim that I think multiple job holdings should have increased over the last two decades. And the bottom line of what I'm trying to say is for the very first time we

have two measures of multiple job holding both with a long time series 20 plus years to actually look at what is the true level and trend of multiple job holdings in the US economy. That's where I think the LEHD, this new series from the LEHD is going to attract some attention okay?

The actual thing to do right now is just try and look at the multiple job holding rate by various characteristics. This graph right here shows you the multiple job holding rate by gender.

We see the females have a higher level and a much higher trend. This is not an original finding. This you can get this out of the CPS although the shape of the graph is tilted a little to the downward right but the basic graph looks the same. Keep this male-female differential in mind as we move onto earnings.

We can also look at the multiple job holding rate by age. Here are six possible age categories. The graph is a little cluttered but the key thing to keep in mind here is that the young have a higher multiple job holding rate than the older folks. It's monotonically declining in almost every quarter.

We want to look at the industry of multiple job holders and we want to compare the industry of multiple job holders against the industry distribution of people who are not holding multiple job. So this column right here we're going to only look at persons with a full quarter job. So were dismissing from the data right now people who hold short duration non-full quarter jobs.

So the persons with the full quarter job and no second job, the industry distribution is in this first column and you can see that manufacturing, retail trade healthcare, these are some of the largest industries. We're not - the full industry list would be about 22 industries and there's just not enough space in a PowerPoint slide to put it in.

We now look at the industry of multiple job holders and we will start with their primary full quarter job. So when an individual holds a primary full quarter job it's - we're going to define it as the full quarter job if it's one full quarter job or if they hold two or more full quarter jobs it's the full quarter job that has the most earnings of all full quarter jobs.

The industry distribution of multiple job holders compared to non-multiple job holders is slightly different. The shaded rows right here tell you which industry is different by more than 5 percentage points. Multiple job holders are less likely to be in manufacturing, more likely to be in healthcare, more likely to be in accommodation and food services. We now add the industry of their second job and again if they hold two second jobs this is going to be the industry of those that are the highest paying second job.

What I want you to take away from this is the are no shaded rows. The industry of the second job is within 5 percentage points of the industry of the primary job from multiple job holders. So we don't know this yet. This is further research but persons who hold multiple job holders tend on aggregate to hold the same - to hold second jobs in the same industry as their primary job. One of the things Keith and I are doing right now is to look at whether that holds in the micro data as well as in the aggregate.

One of the nice things about earnings about the LEHD is we have the earnings of every job, not just the primary job but we have the earnings of every job. Even if they hold 12 jobs during the quarter which does happen, we have the earnings of each one. Now most people only hold two jobs. There is an occasional three jobs we can go back to that one matrix that showed the distribution.

But let’s start with earnings. Persons who are not multiple job holders on average in any - earn $15,750 in 2018 quarter one. You it’s - I’m sorry Keith can you go back one slide?

This is a quarter and it’s important to keep in mind that this is a quarterly number. So individuals who hold full quarter jobs and are not a multiple job holder tend on average to hold a little over earn a little over $60,000 a year if they were to work all four quarters. That’s sort of the way I think about these full quarter job earnings numbers because to me quarterly is not a standard reference frame that I think of.

Now let’s add in the multiple job holders. The middle line on this graph is the earnings on the primary job of multiple job holders. The line at the bottom is the earnings of the second job for multiple job holders. In 2018 quarter one they earned just a little under $10,000 on the primary job - about $3700 on their second job.

And what’s interesting to note - there’s a graph in our paper that you can look at. When we graph the ratio of multiple job earnings to total earnings, and this is 27.8% and it really does not vary over time. Through the recessions and the expansions through the 90s all the way up to the 2018 this is a very constant number.

So next slide please. Okay yes perfect. So on average the line we just added here the second from the top is that multiple job holders earned 13,550 from all jobs in 2018 quarter one. This is less than the - let me get that number so I can be exact. This is less than the 15,750 that non-multiple job holders earned in 2018 quarter one.

We have a full regression analysis in our paper that documents - that tries- seeks to explain why non-multiple job holders earn more from their one job than multiple job holders earn from all jobs. The key thing here and we saw it earlier is that multiple job holders tend to be female, young and work in retail trade and the services.

So when you take a count of all of these differences and females, the young and the retail trade and services are generally on average lower earnings, industries' lower earnings demographics that fully explains the multiple job holding difference. And when you compare multiple job holder to their peers in terms of gender, age and industry the multiple job holders earn more than their peers who look the same.

We now want to ask how does multiple job holding vary across the earnings distribution? So the horizontal axis right here is the percentiles from the first percentile up to the 99th percentile, the percentile of total earnings for all persons who have a full quarter job. And we want to see at any given percentile how many persons at that percentile hold a multiple job?

So if you look at say but tenth percentile we will see that about 12% to 13% of individuals at the tenth percentile of earnings have a multiple job. You jump down to the 95th percentile and you're going to say about 6 1/2 to 7% of people at the 95th percentile of earnings hold a multiple job.

So the key thing here is in addition to the inverse U-shape of this graph is that multiple job holding really is most dominant for the lower income individuals. There is a truth that these lower income individuals are putting together several - two or more jobs in order to make ends meet. But the thing that always amazes Keith and myself when we look at this graph is that people

even at the top 10%, top 5% of the earnings distributions more than 6% of them are holding multiple jobs.

So now we want to go and we want to ask how much of total earnings are these multiple jobs contributing to? And this is the graph that just knocks my socks off. Once again the horizontal axis is percentile of total earnings for full quarter job holders. So at in the first ten percentile these individuals are earning anywhere from 40% to 32% of their earnings from their second job. So their second job or second jobs plural are serious sources of income.

The average here which we know from earlier was 27.8. And what really knocks my socks off here is this graph never goes below 25%. So think about the high earnings individuals, individuals at the tenth percentile, individuals in the top ten percentile, in the top five percentiles these individuals are earning more than - those individuals who are multiple job holders are earning more than 25% of their earnings from their multiple jobs.

Why? This is something that Keith and I are pushing the data on but I don't have any empirical facts for this, but what I think is going on is these are doctors. I think the doctors have one job in their private practice and one job at the hospital. And they do surgeries on Thursdays and see patients Monday, Tuesday Wednesday and Friday.

It's not - although many people would say "Hey this is the same job. It's a surgeon or it's a doctor," they actually have two distinct sources of income coming in rather than one source of income. Keith and I are trying to push the data to actually learn the industry distribution of these very high income individuals.

So let me summarize what Keith and I have done is we've shown how to define multiple job holding using quarterly administrative records. Administrative records do not come in with economic statistics in mind. Administrative records exist in order to serve some programmatic purpose such as the wage records are used in the state UI systems.

So we had to do some serious thinking and some serious data manipulation in order to get a multiple job holding definition. Now the advantages of using administrative records are as Keith mentioned, very large sample sizes and you have earnings from multiple jobs for every job. So we've tried to take advantage of this.

And if you're going to walk away from this presentation I would ask you to walk away with the following four stylized facts. Multiple job holding has been rising during the last several decades from 6.8% in '96 to 7.8% in 2018.

Multiple job holding is cyclical, falls in recessions. On average earnings from multiple jobs are 27.8% of total earnings of a - of that multiple job holder. And multiple job holding occurs at all levels of earnings and at every point on the earnings distributions multiple job holdings accounts for more than 25% of total earnings of multiple job holders.

As I have mentioned several times there are several next steps that were pushing the data. This is a multiple job holding series from 18 states. If an individual is observed to live in say New York we - although New York is not one of our 18 states. I'm using it as an example. Their second job may be in New Jersey, may be in Connecticut or may be in any other state especially if they're teleworking from an employer in California.

So what we wanted - so what Keith and I are working on right now is we're producing state level multiple job holdings data. And we're doing it two ways. We're looking at multiple job holding as you would record it only if you saw jobs within that state. And then we're looking at multiple job holdings where the individual can hold a job across any of the other 49 states plus DC, Puerto Rico, Virgin Islands.

The ambitious thing that we're going to do is we want a link to CPS and the LEHD micro data which is possible. And we want to analyze at the micro level why multiple job holdings seems to differ across these two series. Right now all we have is supposition about why the two are different but if we can dive into the data perhaps there is easy explanation such as demographic differences or industry differences or maybe there's just a certain type of person, the doctor for example who doesn't record multiple job holding in the CPS but does when we look at the administrative records. And of course, we want to look at these doctors.

So I'm going to conclude with one more slide. Everything I've just shown you plus a whole heck of a lot more are in our working paper which is available on the Center for Economic Studies Web site. And of course you can always contact Keith and myself at the email keithabailey@census.gov and Jamesrspletzer@census.gov. I look forward to the questions and any comments that participants may have. Thank you.

(Earlene): (Cedric) we're ready for questions.

Coordinator: Okay. If you'd like to ask a question please press Star then 1. Remember to unmute your phone and record your name clearly when prompted. If you'd like to withdraw that question you may press Star 2. Again if you'd like to ask

a question please press Star then 1. One moment to see if we have any questions.

(Earlene): While we're waiting we received a few questions regarding the presentation which will be accessible on the Census Academy Web site in a week or two as census.gov/academy under the Webinar tab. Please be courteous and keep your questions pertaining to the presentation with one follow-up question.

And while we're waiting for the calls on - I mean the calls on the phone to queue up I do have a few that came from the chat. One of the questions was early on in the presentation, "How are deaths identified?"

Keith Bailey: If I can jump in here so maybe a clarification, are you talking about business death? If that is the nature of the question our multiple job holdings does not consider the - a business death. But certainly as the employer employee relationship is defined if the employer is no longer in business that then terminates that particular employee employer relationship which results that either in not a full quarter job or if it's later in the series it becomes not a multiple job holder.

(Earlene): Great. Another question was, "So this data counts people who have more than one W-2 job but does not count a person who has a W-2 job and a side gig such as a hairstylist, graphic design or handyman?"

Keith Bailey: That is correct. At present we do not have not identified a substantial, sufficiently substantial data set that helps us to look at the non-UI covered employment of individuals. But we are not only looking at that from a multiple job holding perspective but also the Center for Economic Studies and the LEHD program continues to explore the range of data that would be

available to help in that regard. And in fact Jim and his colleagues are very engrossed in gig economy research.

James Spletzer: And just to follow up very quickly. We do have access to the universal Schedule Cs, not for every year here but for the recent years. And Schedule Cs do give us - are published by the Census Bureau as part of the Non-employer Program. And we do note self-employment for everyone who earned more than $1000 a year in and filed a Schedule C.

Now the technical problem is that the LEHD data are quarterly, the self-employment records are annual and you have to transform the wage and salary jobs into an annual basis and then merge them with the self-employment. So it's a long run research problem.

Keith Bailey: Thank you Jim.

(Earlene): I have tons more on the chat - from the chat. "Did I hear correctly that this data only includes statistics for private employers? We wouldn't have comparable earnings info if one of the employer's jobs is in the public sector?"

Keith Bailey: To elaborate on Jim's most recent comment we do have more recent access to data about public employees at the federal level. We do get most of the information at a state level but we do not have the time series history that we used for this research that incorporates the public sector employees.

(Earlene): "Is the data granular enough to map the population of multiple job holders by household, census tract, ZIP Code, et cetera, or is it just general population statistics based on available labor force?"

Keith Bailey: I'll let Jim answer that question.

James Spletzer: We do know the geography of the job from the QCEW data. That's one of the key advantages of the QCEW data. There is a technical issue that the wage records come in at the UI account level rather than the UI run, but let's just say we know the ZIP Code. So it is possible to create multiple job holdings at the ZIP Code, perhaps even census tract but then you're starting to hit disclosure problems.

The other part of the question is that we cannot do it at the household level because all we know is the person's identifier. We do not know who the person is within a household. We would have to merge in something like the decennial census in order to get a household composition measure and that would only be at a point in time. So looking at multiple job holding between spouses is something that's way down the road.

(Earlene): Okay so at this time I'll pause on the chat questions and see if (Cedric) has any questions on the phone?

Coordinator: Yes we do have one question. Oh, I lost it sorry.

(Earlene): Okay great.

Coordinator: (Aubrey) your lines open.

(Aubrey): Awesome. Can you guys hear me?

Keith Bailey: Yes.

James Spletzer: Yes. Hi (Aubrey).

(Aubrey): Perfect, beautiful. Thank you Keith and Jim for hosting this -- I appreciate it. My question was more I guess speculative on working data and the working paper. But do you expect with interstate multiple job holding the results about the wage distribution should be different or do you expect them to be the same as the findings with just - within, you know, the larger demographics that we - that you looked at in the recently published paper?

Keith Bailey: I would - I'll start first and then Jim can add or detract from my comments. In my experience working at a state level when you start to look at the individual labor market the parameters of that labor market will almost certainly create some uniqueness in the distribution of earnings if you're looking at either a high wage cross state labor market or a low wage cross state labor market bearing in mind that this is the 18 state sample. So there are, you know, there - you obviously are masking some of the uniqueness of the individual labor markets.

But what we find and then Jim mentioned this multiple times just fascinated and surprised by the higher than 25% that we observed at all earnings distributions. But I would certainly expect at different levels of geography in different labor sheds we would start to see some unique perspectives emerge. And I'll let, you know, Jim if you want to add to that or retract.

James Spletzer: No I think it's a fascinating question and essentially in my mind it boils down to what types of multiple jobs do you hold in person close to your home versus telecommuting that could be across state lines and especially distances away? I have no idea how to answer that because I've never really thought about before but it's a really interesting question. And I look forward to the data that we're about to produce at - with these state level estimates.

(Aubrey): Thank you. In a quick follow-up to that about remote working. When you receive the unemployment wage record wouldn't that UI account number still be associated with their state that they're living in?

James Spletzer: Yes so…

Keith Bailey: But in the sense that we do not currently have the data that we get from the states through the wage records does not distinguish between a job that is being held at a particular facility or whether that person is teleworking. That level of detail does not exist in the wage record data we received from the states.

We are beginning to examine information about teleworking from other survey sources with no real knowledge of how we would incorporate that into the LEHD data but certainly it has become a - more of a growing interest on our part as well as the larger economic and workforce development entities across the country.

(Aubrey): For sure, for sure. Thank you both I appreciate it.

Coordinator: I'm showing no further questions.

(Earlene): All right I have more. "Do you have comparisons to SIP over time as well as CPS?"

Keith Bailey: Our literature review for our research we did look at a recent study done on the SIP outcome and we have had conversations within census about the comparison to SIP. One major distinction or difference between SIP and what we have in LEHD is the length of the time series. And the researchers that looked at the multiple job holding within the SIP acknowledged the existence

of LEHD within their research paper as we did in our literature review. Jim would you like to - I don't know if you've taken the time to look into the details on the SIP report?

James Spletzer: No it's the reason we didn't emphasize SIP is that it just does not have the long 20 plus year time series.

(Earlene): Okay. "Do you have this data broken down by race and ethnicity?"

James Spletzer: No.

Keith Bailey: Go ahead Jim.

James Spletzer: We - it is possible to do that but we did not do it here. And we get our demographics from multiple sources within the Census Bureau but our main source of demographics comes from what we call the SSA Numident which is the demographics that you apply that you put on your form when you apply for a Social Security Number.

The race and ethnicity has undergone some OMB re-definitions over the last several years and so I am particularly worried about the consistency of the race and ethnicity data over a long time series. And it - also we just focused on age and gender. It is possible to do race but we did not do it here.

(Earlene): Okay, "Is full quarter jobs considered full-time, part-time or something else?"

Keith Bailey: We don't make a specific distinction because the data does not allow us to know with certainty whether a job is a part-time or a full-time job. Recall earlier in the presentation one of the challenges of looking at a specific quarter in the existence of two or more employee employer relationships we don't

have information that tells us when in that quarter the employment was held or the wages were paid.

So we intentionally do not make a distinction of part-time versus full-time. Again we're focusing on the research of looking at defining a full quarter job in the context of looking at the previous quarter and the following quarter in order to try to ascertain the existence of a multiple job.

(Earlene): Okay. And then before we jump…

James Spletzer: And to expand on that really real quick, to expand on that very quickly it - at the extreme it is possible that someone can work one hour a month and do that all 12 months of the year. So they would be a full quarter job holder even though they only work three hours a quarter. That is extremely rare. I don't know if that happens because we don't have hours stated in the 18 states.

But there are several states for programmatic reasons that do have hours data on their wage records. We have not explored that in this research but that - I'm writing it down as a suggestion of something to do in the future.

(Earlene): Thank you. "What are the earnings equivalents in dollars of tenth and 95th percentiles?"

James Spletzer: It may be in the paper. Off the top of my head I do not know. I don't want to estimate off the top of my head. Send me an email and I'll let you know.

(Earlene): Great. And then I'll ask one more question before we see if there's any more on the phone line. "Won't this data be somewhat skewed with the impact of COVID on job losses, gains and massive demand for essential workers in low skilled, low wage jobs primarily entry-level jobs in retail, hospitality,

healthcare, food services, et cetera? Are there plans to compile this data specific to COVID unemployment and employment trends?"

Keith Bailey: I'll answer that from a general perspective. Jim and I developed this research with the intent of continuing to examine and analyze the historical series moving forward. At present we are just now receiving the second quarter 2020 data that would be the initiation of most of the business decline as a result of the COVID-19 pandemic.

We fully intend to continue the analysis beyond the beginning point of the pandemic. This research though as it ends at 2018 quarter one certainly will not cover any of that because it just doesn't capture that time period. At the same time, you know, Jim made reference to the cyclical nature of the multiple job holding in LEHD.

It is reasonable to anticipate that we will start to see impacts of the business closures and changes in employment patterns. It does not - I'm personally not going to speculate as to what the volume or impact measurements may be. But this is as an economic event that I would I think I'm safe to say none of us in our lifetime have experienced before. So with that Jim certainly add a little color to that if you want to.

James Spletzer: I do believe that this new multiple job holding series will be used in policy analysis. But like you said Keith we are lagged but at least six months and we don't even have this multiple job holding in production yet. So we won't be able to look at the COVID until at least later this calendar year.

I think it will be utterly fascinating what we see because this is what policymakers are concerned of is who's earning what income, how are they piecing it together across one job or multiple jobs and what are the

characteristics of both the people and the jobs that are being held during this COVID pandemic. I look forward to what we're going to learn.

(Earlene): (Cedric) is there - are there any calls?

Coordinator: Still showing no questions.

(Earlene): Okay. Then I will continue with my questions. "Are you familiar with the United Way's data on growing ALICE population, Asset Limited Income Constraint Employed? These are the large numbers of workers just mentioned who work two to three jobs but still earn far below the basic survivability budget for the cost of living where they live. They are one crisis shy of poverty level."

"Would this tool data be applicable to identifying this population in our county for targeted outreach and intervention by community or is the data too broad to get to that level of specificity?"

Keith Bailey: From a policy perspective and then Jim alluded to this, we foresee the utility of this multiple job holding data in concert with many of the other products that census is developing and/or has published to assist users in combining data in a research environment or just a public use data to stitch together and understanding of an area impact and particularly when you look at particular policy focuses such as the ALICE population.

At this point as Jim mentioned in a quick passing technical comment census is obligated to ensure the confidentiality and data privacy inherent in all data products. So if you can imagine the myriad combinations and matrices of splitting this data and making the matrix of cross tabs we must be very

conscientious of, you know, unintentionally revealing information about smaller populations.

So I think it's a great policy question. I would encourage the learned individuals on this phone and those who work with the data we are definitely encouraged by what we seen as far as the use of all census products and certainly are willing to have the discussions and partner with agencies and entities to see how we can make greater utility of the data that we have developed or are on the precipice of developing. I know that really wasn't a direct answer but I have to be very careful regarding policy -related responses.

(Earlene): "What does earnings include? Does it include bonuses, stock options, question mark?"

Keith Bailey: The wage record data that we receive from the state partners that includes the earnings is generally defined - there is a kind of - there's not really a federal standard of earnings. Each state has as part of its unemployment insurance regulations what constitutes an earning or what constitutes earnings from an individual.

They are fairly consistent across state partners but again each state lays out in regulations and policies as to what earnings should be reported by employers within their unemployment insurance system and it is that data that we receive.

(Earlene): Okay great. Have you looked it the impact multiple job holdings has on unemployment rates, e.g., people who have a job already competing with people who still need their first job?"

James Spletzer: I'll give two possible answers to that. At the micro level no because that would require linking the CPS micro data to the LEHD which is possible and is on our to do list.

But to look at whether specific individual is multiple job holding one quarter unemployed the next or some sequence of that sort, you need the link to micro data which we don't - which we have not produced yet.

At the macro level you can sort of - you can envision a way to do it. You can either look at geography data such as is the unemployment - how correlated are the unemployment rate and the multiple job holding rate in a certain ZIP Code or certain county and then look at both the variation across geographies and across time for specific geography. That is something in the future when we decide how we publish this data as an official product and at what levels, geographical levels we publish it.

Keith Bailey: And I'll kind of add on to that, thank you Jim that, you know, you've seen that we have the ability to do multiple job holding by age bracket. Many state LMI bureaus also have a capability to develop a moving average unemployment rate by age category. Some states publish the data, some states stay away from that.

I'm not speaking for anyone state. I'm just saying that it does exist in some states. So where that data is available as Jim pointed out simply looking at the comparability or the trends and the information what, one may be able to ascertain from looking at that data is subject to the limitations of the data set. But it is part of that, you know, that first kind of slide about the utility of additional research. And that is, you know, are people who have multiple jobs taking away opportunities from individuals who are looking for the first job? That is a very sustained issue in the world of workforce development.

(Earlene): Alright another question, "Where can I access this data? If it is quarterly data what is the most recent data? As I understand it goes down to a county level. And my final clarification we do not know why the LEHD and the CPS data differ right?"

Keith Bailey: I invite you Jim to respond.

James Spletzer: Okay, two parts. First part, you can access the LEHD publications on the LEHD Web site just Google LEHD or Census LEHD. We publish multiple types of products. We publish job to job flows on the map for emergency management on the map and the QWIs.

I'm most familiar with the QWIs where you can get quarterly data on hires, separations put job to job flows in there. You can break - you can get earnings of full quarters employees demographics by industry by geography. You can get the hires and separations by all these breakdowns too and I believe that you can get them at the county level. I forgot the second part of the question.

(Earlene): LIC, oh.

James Spletzer: CPS. We don't yet know why the CPS and the LEHD have different levels and different trends. I'm not worried about the different levels because we are essentially comparing apples versus oranges. There's different concepts, different reference periods but it's a trend that concerns me and especially sharp distinct trend difference that we're observing where the LEHD has been going up cyclically and the CPS has been monotonically decreasing over the last 20 years. This is something that Keith and I are delving into deeper and I think we need the linked micro data in order to answer that.

(Earlene): Okay. "How much industry detail is available?"

James Spletzer: In our working paper we restrict to I believe what we call industry sectors, the 22 two-digit sectors. We have several tables in the paper that list the full industry distribution for these 22 sectors. If you go to the LEHD Web site you want employment earnings, higher separations by industry you can get it at a much - more detailed level than two-digit sector.

Keith Bailey: Yes generally the LEHD data products go to a four-digit industry level.

(Earlene): "Do you foresee being able to confidently provide this data with respect to race and ethnicity at any time in the future? If so when would you think you may be able to provide it?"

James Spletzer: I would say yes we will be able to provide it but I'm very hesitant in putting a time frame around this because this is still a research product that we just developed and we're giving it its first public test run. Now we have received very positive feedback on the few times we have presented this and shared it with others and race has come up several times.

So as we move it from initial research into much more serious research and then into a publication process, I'm almost - I'm very confident that we will add race and gender to the - race and ethnicity to the age and gender breakdowns that Keith and I did. I can't put you - I can't give you a time frame on that because that relies on staff resources and the list of to do items for all the staff members in the LEHDs are already quite large.

(Earlene): Okay. And this is the final question from the chat. "Is there an anticipated release date for this new MJH LEHD series? When can I find it alongside J2J, LODES, PSEO and the other data products?"

Keith Bailey: I think Jim's response to the previous question kind of indicates that that is an un-knowable date at this period in time. As Jim alluded to, the process of going from a research paper to productionizing within census varies tremendously.

Certainly Jim and I are eager to accelerate the utility and access to this data as much as possible but we need to do it within the processing parameters and the resources that we have within census. So unfortunately it's not reasonable to even propose whether or not this will even happen this calendar year.

But it has definitely received a lot of attraction within Census, a lot of attention within Census. And Jim and I feel as though it represents one of the most significant advancements in LEHD just right alongside of the post-secondary employment outcomes data product. And we are going to continue to pursue production this research.

(Earlene): I apologize. One last question. So is a multiple job holding more of a concern as indicated by your data upward trend or less of a concern as reported by CPS downward trends, which series should we use?"

James Spletzer: I'll take that one and I'll answer in two parts. The first one is I'm going to push back a little on the word concern. I don't think we're concerned about either about the trend. An upward trend in ~~and~~ the LEHD series may actually be good for the economy in that the cost of taking on a second job has dropped meaning the ease of taking on a second job has dropped.

So if individuals are doing a rational cost-benefit decision they may find it good to take on a second job.

On the other hand there's a lot of policymakers who say notable job holding is a necessary thing in order to make ends meet. So whether individuals voluntarily put themselves into there or whether they're pushed into therefore income reasons there are multiple reasons why an individual may be a multiple job holder. And some are good some are bad so I'm not going to use the word - I'm cautious about using the word concerned there.

Which one should we use? Keith may not like this answer but I would say use the CPS right now. The CPS is a well-established series. It is on the BLS Web site. You can get it by age, you can get it by gender. LEHD is not there yet. This is one research paper that does show a different trend in the CPS.

And I personally believe that the LEHD series is of higher quality and the upward trend meets my priors. But we have not test driven this to the full extent against the CPS that we need to in order for me to actually say the better series is blank. At the end of the day going with the well-established series but keep in mind that there's a research series out there that is showing something different and it's Keith and my job to actually show why it's different.

Keith Bailey: And to put Jim's to give you some peace of mind, I don't have any issues with Jim's response on that. The CPS is a well-established proven data series. And even with its limitations of sample size at the state level it is readily available to get into the data behind the CPS and do the analysis.

As Jim has alluded to and I have alluded to several times this is - you're seeing very much kind of infancy of this research initiative. And we're really pleased to be able to share what we have developed thus far and what we have witnessed thus far. But there is much more work to be done than what we have already done on this topic.

(Earlene): Great.

Keith Bailey: …a little liberty here there were a number of questions most of them private. The research paper itself does identify the 18 states that were included in the data series. So I would encourage everyone to at least if you're interested in the coverage on Page 6 of the research paper it does identify the 18 states.

(Earlene): All right yes (Cedric) are there any questions on the phone?

Coordinator: Still showing no questions.

(Earlene): Excellent. All right so thank you everyone for joining us this afternoon and thank you to Keith and Jim for this fascinating presentation. We received a lot of positive feedback.

The LED Webinar series will still continue again on March 17, 2021 at 1:30 pm Eastern Standard Time when Zillow presents using Census and Zillow Data to Understand COVID-19 Impact on the Housing Market.

Also if you're still on the line -- and we appreciate that you're still here -- there was a link to an evaluation that we would appreciate if you could take the time to fill this out so that we are able to better serve you. Other than that I hope everyone enjoys the rest of their Wednesday and thanks again.

Coordinator: Thank you and that concludes today's conference. You may all disconnect at this time. Speakers you may stand by for post conference.

END